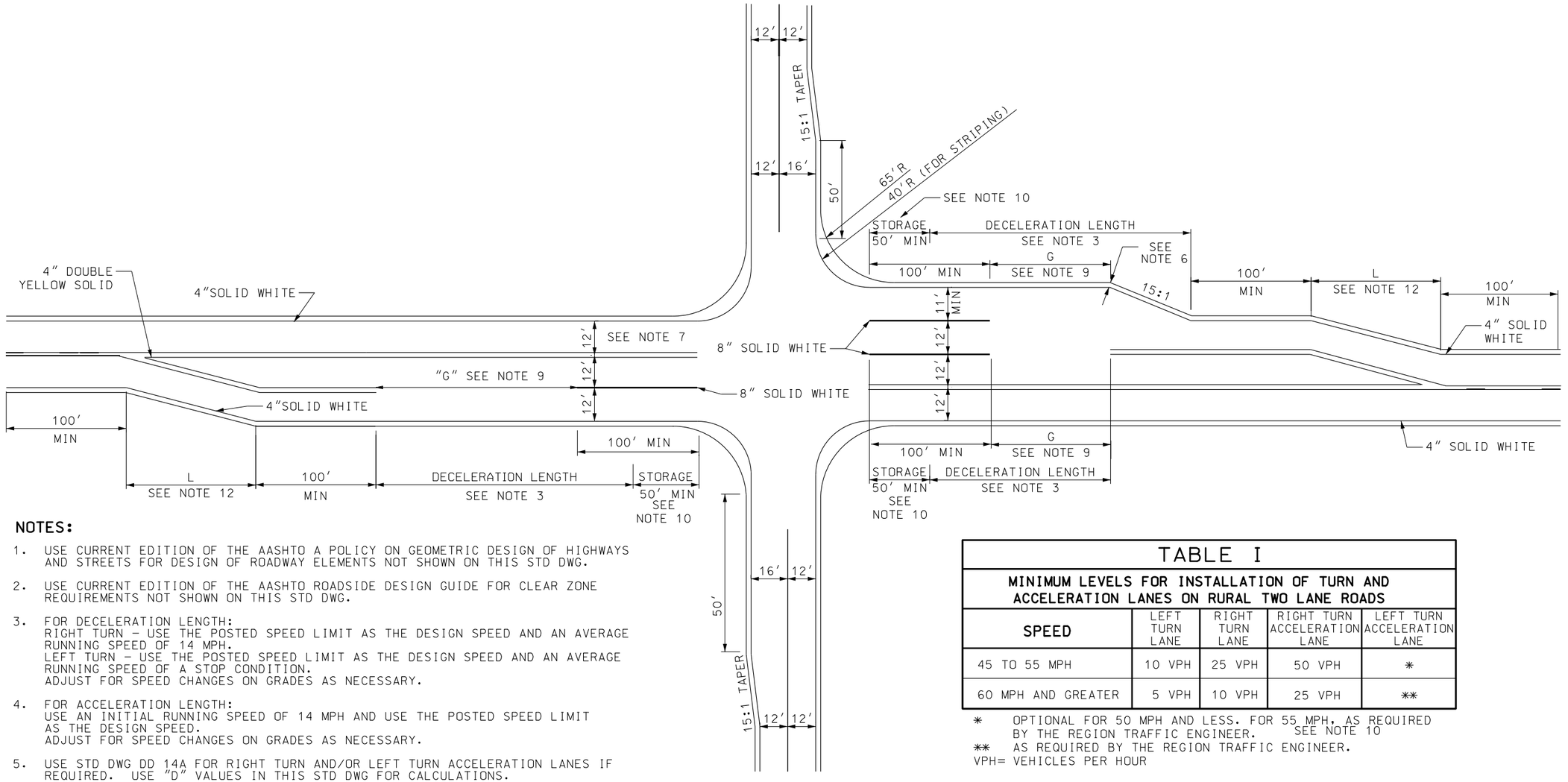

NOTES:

1. USE CURRENT EDITION OF THE AASHTO A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS FOR DESIGN OF ROADWAY ELEMENTS NOT SHOWN ON THIS STD DWG.
2. USE CURRENT EDITION OF THE AASHTO ROADSIDE DESIGN GUIDE FOR CLEAR ZONE REQUIREMENTS NOT SHOWN ON THIS STD DWG.
3. FOR DECELERATION LENGTH:
   RIGHT TURN – USE THE POSTED SPEED LIMIT AS THE DESIGN SPEED AND AN AVERAGE RUNNING SPEED OF 14 MPH.
   LEFT TURN – USE THE POSTED SPEED LIMIT AS THE DESIGN SPEED AND AN AVERAGE RUNNING SPEED OF A STOP CONDITION.
   ADJUST FOR SPEED CHANGES ON GRADES AS NECESSARY.
4. FOR ACCELERATION LENGTH:
   USE AN INITIAL RUNNING SPEED OF 14 MPH AND USE THE POSTED SPEED LIMIT AS THE DESIGN SPEED.
   ADJUST FOR SPEED CHANGES ON GRADES AS NECESSARY.
5. USE STD DWG DD 14A FOR RIGHT TURN AND/OR LEFT TURN ACCELERATION LANES IF REQUIRED. USE "D" VALUES IN THIS STD DWG FOR CALCULATIONS.
6. USE 4 FEET MINIMUM SHOULDER FOR RIGHT TURN DECELERATION LANE TAPER, RIGHT TURN STORAGE LANE, RIGHT TURN ACCELERATION LANE, AND RIGHT TURN ACCELERATION LANE TAPER. MATCH EXISTING WIDTH OF SHOULDER, WITH A 4 FEET MINIMUM, AT ALL OTHER SHOULDER LOCATIONS.
7. USE A 16 FEET MINIMUM ACCEPTANCE LANE FOR 50 FEET WITH A 15:1 TAPER WHEN RIGHT TURN ACCELERATION LANE IS NOT USED.
8. STANDARDS SHOWN ARE RECOMMENDED VALUES. EXCEED STANDARDS IF CONDITIONS PERMIT.
9. G = 140′ FOR SPEEDS 45 TO 50 MPH
   G = 180′ FOR SPEEDS 55 MPH AND ABOVE
10. INCREASE VEHICLE STORAGE LENGTH AS DETERMINED BY ENGINEERING STUDY OR REGION TRAFFIC ENGINEER.
11. SEE STD DWG ST 5 FOR INFORMATION ON STRIPING DETAILS.
12. FOR POSTED SPEED ≥ 45 MPH L = WS
    L = TAPER LENGTH IN FEET
    W = WIDTH OF OFFSET IN FEET
    S = SPEED IN MPH
13. PROVIDE A TWO WAY LEFT TURN LANE CONNECTING ADJACENT ACCESS POINTS WHEN THEIR, TAPERS OVERLAP, OR AS REQUIRED BY THE REGION TRAFFIC ENGINEER.
14. OPTIONAL USE OF W4-2R, RIGHT LANE ENDS SIGN, AT A DISTANCE "D" UPSTREAM FROM THE BEGINNING OF THE TAPER.

TABLE I

MINIMUM LEVELS FOR INSTALLATION OF TURN AND ACCELERATION LANES ON RURAL TWO LANE ROADS

SPEED	LEFT TURN LANE	RIGHT TURN LANE	RIGHT TURN ACCELERATION LANE	LEFT TURN ACCELERATION LANE
45 TO 55 MPH	10 VPH	25 VPH	50 VPH	*
60 MPH AND GREATER	5 VPH	10 VPH	25 VPH	**

* OPTIONAL FOR 50 MPH AND LESS. FOR 55 MPH, AS REQUIRED BY THE REGION TRAFFIC ENGINEER. SEE NOTE 10
** AS REQUIRED BY THE REGION TRAFFIC ENGINEER.
VPH= VEHICLES PER HOUR

"D" DISTANCE

SPEED MPH	"D" FEET	3/4 "D" FEET
45	750	565
50	850	640
55	950	715
60	1100	825
65	1200	900

SUPPLEMENTAL DRAWING

REVISIONS

NO.	DATE	APPR.	REMARKS
1	04/26/07	JL	NEW DRAWING.

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL — APR.26,2007 DATE
CHAIRMAN STANDARDS COMMITTEE
APPROVED — APR.26,2007 DATE
DEPUTY DIRECTOR

TYPICAL RURAL 2 LANE ROAD INTERSECTION (HIGH SPEED)

STANDARD DRAWING TITLE

STD DWG
DD 15A1